



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,698	01/22/2001	Alan W. H. Grant	48971-023 (AWGK-001)	1729

7590 12/15/2004  
McDermott Will & Emery  
28 State Street  
Boston, MA 02109-1775

EXAMINER

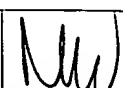
THAI, CANG G

ART UNIT	PAPER NUMBER
----------	--------------

3629

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/766,698	GRANT, ALAN W. H.	
	Examiner	Art Unit	
	Cang G. Thai	3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>January 22, 2001</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

This application is the benefits of an earlier Provisional Patent Application No. 60/176,927, filed January 20, 2000.

### *Information Disclosure Statement*

1. The information disclosure statement (IDS) submitted on January 22, 2001. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement.

### *Claim Rejections - 35 USC § 101*

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-3, 5 & 6, 4, and 7-8 are rejected under 35 U.S.C. 101 because the claim of invention is directed to non-statutory subject matter.

In order for the claimed invention to be statutory subject matter, the claimed invention must fall within one of the statutory classes of invention as set forth in USC § 101 (i.e. a process, machine, manufacture, or composition of matter which has practical application in the technological arts).

In the present case, Claim 1 is directed to a method product for "quantifying the value of a constituent population", which is not within one of the classes of invention set forth in USC § 101.

The method product for "quantifying the value of a constituent population" including:

Art Unit: 3629

- A) identifying a number of exchange elements which are offered to the constituent population by the entity;
- B) associating a cost to the entity with each of exchange elements;
- C) summing the exchange element cost to the entity for constituent population to obtain a total exchange element cost;
- D) identifying a number of behaviors of constituent population;
- E) associating a value with each of behaviors;
- F) summing the value of the behaviors associated with the constituent population to obtain a total behavior value; and
- G) quantifying the value contributed to entity by constituent population by subtracting the total exchange element cost from the total behavior value."

In the above claim, it is merely an abstract idea and does not produce a useful, tangible, concrete results-which has practical application in the technological arts.

The method product for "quantifying the value of a constituent population" including the steps of (A)-(G) as shown are merely an abstract idea and does not reduce to a practical application in the technological arts (i.e. interaction in the steps with the computer/computer network or other equivalent means) and are therefore are found to be non-statutory.

The method product for Claims 1, 4, and 7 are merely an abstract idea and do not reduce to a practical application in the technological arts (i.e. interaction in the steps with the computer/computer network or other equivalent means) and are therefore are found to be non-statutory. See *In re Alappat*, 33 F.3d at 1544, 31 USPQ2d at 1557, or

Art Unit: 3629

*In re Waldbaum*, 173 USPQ 430 (CCPA 1972) or *In re Musgrave*, 167 USPQ (CCPA 1970) and *In re Johnston*, 183 USPQ 172.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 1-3, 5 & 6, 4, and 7-8 are rejected under 35 U.S.C. 112, second paragraph, as failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-3, 5 & 6, 4, and 7-8 are being done manually or automatically by the system? Is also not clear on how the information is derive without any source of database to obtain and stored the information prior to perform the summing step.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 5 & 6, 4, and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,577,169 (PREZIOSO).

As for Claim 1, PREZIOSO discloses a method of quantifying the value of a constituent population of an entity to the entity comprising:

Art Unit: 3629

- A) identifying a number of exchange elements which are offered to the constituent population by the entity {Column 5, Lines 36-37, wherein this reads over identifying subject peer group to be profiled”};
- B) associating a cost to the entity with each of exchange elements {Column 5, Lines 41-43, wherein this reads over “each behavior characteristic that will measure membership of an entity based on an amount of behavior characteristics”};
- C) summing the exchange element cost to the entity for constituent population to obtain a total exchange element cost {Element 2660 – Determine Amount / Degree of Membership in Each Behavior Characteristic for Each Entity};
- D) identifying a number of behaviors of constituent population {Element 420 – Identify Characteristic of Target Behavior};
- E) associating a value with each of behaviors {Element 430 – Determine Algorithms for Quantifying Behavior Characteristics};
- F) summing the value of the behaviors associated with the constituent population to obtain a total behavior value {Element 490 – Calculate and Store Behavior Characteristic Values for Each Entity}; and
- G) quantifying the value contributed to entity by constituent population by subtracting the total exchange element cost from the total behavior value {Column 26, Lines 55-59, wherein this reads over “selecting a subset of entities in the peer group based on the amount of the target behavior exhibited. This process involves an evaluation of what amount of target behavior is actionable in

a way contemplated by the process described in the Element 410 (Identify Target Behavior)"}.

As for Claim 2, PREZIOSO discloses further comprising:

- H) determining an experience of constituent to at least one of exchange elements offered by entity {Column 9, Lines 12-14, wherein this reads over "determine the algorithms for quantifying behavior characteristics or indicators of the target behavior"};
- I) obtaining data relative to constituent's mindset regarding experience {Column 9, Lines 38-41, wherein this reads over "data elements identified in the algorithms for quantifying each behavior characteristic are determined to be available in a format and operating environment compatible with the system"};
- J) constructing at least one value exchange gap based on data {Column 9, Lines 43-48, wherein this reads over "data required to calculate a given behavior characteristic is determined to be unavailable or unusable, the behavior characteristic requiring the unavailable data will need to be modified to conform with more readily available data, or steps must be taken to make the required data available"};
- K) determining behaviors of constituent which result from experience and mindset data {Column 7, Lines 24-28, wherein this reads over "data used to profile physicians and other peer groups in health care is generally health claims billing data that is commonly available in private health insurance companies and in

Art Unit: 3629

government agencies responsible for administering public health care programs such as Medicare”};

- L) linking particular exchange elements to particular resulting behavior of constituent {Column 7, Lines 13-15, wherein this reads over “a key element of the data used in profiling a peer group is that it be organized, or be organizable, according to the definition of the peer group”}; and
- M) adjusting exchange elements to cause constituent to exhibit behaviors which are more valuable to the entity than previous behaviors {Column 3, Lines 13-16, wherein this reads over “improved system and method that is expandable in that behavior characteristics of an entity can be added without restriction, to determine the behavior profile”}.

As for Claim 3, PREZIOSO discloses further comprising tracking the value attributed to adjusted exchange elements over time {Column 3, Lines 1-4, wherein this reads over “complex behavior profiling requires a solution that is flexible, extensible, domain independent, and can be routinely implemented in varying types of computing environment with commonly available skills”}.

As for Claim 5, PREZIOSO discloses further comprising:

- F) associating a cost to the entity with each of exchange elements {Column 5, Lines 41-43, wherein this reads over “each behavior characteristic that will measure membership of an entity based on an amount of behavior characteristics”};



Art Unit: 3629

- G) summing the exchange element cost to the entity for constituent to obtain a total exchange element cost {Element 2660 – Determine Amount / Degree of Membership in Each Behavior Characteristic for Each Entity};
- H) associating a value with each of behaviors {Element 430 – Determine Algorithms for Quantifying Behavior Characteristics};
- I) summing the value of the behaviors associated with constituent to obtain a total behavior value {Element 490 – Calculate and Store Behavior Characteristic Values for Each Entity}; and
- J) quantifying the value contributed to entity by constituent by subtracting the total exchange element cost from the total behavior value {Column 26, Lines 55-59, wherein this reads over “selecting a subset of entities in the peer group based on the amount of the target behavior exhibited. This process involves an evaluation of what amount of target behavior is actionable in a way contemplated by the process described in the Element 410 (Identify Target Behavior)”}.

As for Claim 6, PREZIOSO discloses further comprising tracking the value attributed to adjusted exchange elements over time {Column 7, Lines 6-9, wherein this reads over “business unit performance data can be obtained from corporate computer system including general ledger, accounting systems, auditing systems and other similar business systems”}.

As for Claim 4, PREZIOSO discloses a method of modeling behaviors of a constituent with an entity comprising:

Art Unit: 3629

- A) determining an experience of constituent to an exchange element offered by entity {Column 7, Lines 24-28, wherein this reads over "data used to profile physicians and other peer groups in health care is generally health claims billing data that is commonly available in private health insurance companies and in government agencies responsible for administering public health care programs such as Medicare"};
- B) obtaining data relative to constituent's mindset regarding experience {Column 9, Lines 38-41, wherein this reads over "data elements identified in the algorithms for quantifying each behavior characteristic are determined to be available in a format and operating environment compatible with the system"};
- C) identifying one or more value exchange gaps based on data {Column 9, Lines 12-14, wherein this reads over "determine the algorithms for quantifying behavior characteristics or indicators of the target behavior"};
- D) determining behaviors of constituent which results from experience and mindset data {Column 7, Lines 24-28, wherein this reads over "data used to profile physicians and other peer groups in health care is generally health claims billing data that is commonly available in private health insurance companies and in government agencies responsible for administering public health care programs such as Medicare"}; and
- E) linking particular exchange elements to particular resulting behaviors of constituent {Column 7, Lines 13-15, wherein this reads over "a key element of

Art Unit: 3629

the data used in profiling a peer group is that it be organized, or be organizable, according to the definition of the peer group”}.

As for Claim 7, PREZIOSO discloses a method of optimizing the value of an entity comprising:

- A) identifying a number of exchange elements which are offered to a constituent by the entity {Column 5, Lines 36-37, wherein this reads over identifying subject peer group to be profiled”};
- B) associating a cost to the entity with each of exchange elements {Column 5, Lines 41-43, wherein this reads over “each behavior characteristic that will measure membership of an entity based on an amount of behavior characteristics”};
- C) summing the exchange element cost to the entity for constituent to obtain a total exchange element cost {Element 2660 – Determine Amount / Degree of Membership in Each Behavior Characteristic for Each Entity};
- D) identifying a number of behaviors of constituent {Element 420 - Identify Characteristic of Target Behavior};
- E) associating a value with each of behaviors {Element 430 – Determine Algorithms for Quantifying Behavior Characteristics};
- F) summing the value of the behaviors associated with the constituent to obtain a total behavior value {Element 490 – Calculate and Store Behavior Characteristic Values for Each Entity};
- G) quantifying the value contributed to entity by constituent by subtracting the total exchange element cost from the total behavior value {Column 26, Lines 55-59,

Art Unit: 3629

wherein this reads over “selecting a subset of entities in the peer group based on the amount of the target behavior exhibited. This process involves an evaluation of what amount of target behavior is actionable in a way contemplated by the process described in the Element 410 (Identify Target Behavior)”;

- H) determining an experience of constituent to at least one of exchange elements offered by entity {Column 9, Lines 12-14, wherein this reads over “determine the algorithms for quantifying behavior characteristics or indicators of the target behavior”};
- I) obtaining data relative to constituent’s mindset regarding experience {Column 9, Lines 38-41, wherein this reads over “data elements identified in the algorithms for quantifying each behavior characteristic are determined to be available in a format and operating environment compatible with the system”};
- J) identifying one or more value exchange gaps based on data {Column 9, Lines 12-14, wherein this reads over “determine the algorithms for quantifying behavior characteristics or indicators of the target behavior”};
- K) determining behaviors of constituent which result from experience and mindset data {Column 7, Lines 24-28, wherein this reads over “data used to profile physicians and other peer groups in health care is generally health claims billing data that is commonly available in private health insurance companies and in government agencies responsible for administering public health care programs such as Medicare”};

Art Unit: 3629

- L) linking particular exchange elements to particular resulting behaviors of constituent {Column 7, Lines 13-15, wherein this reads over "a key element of the data used in profiling a peer group is that it be organized, or be organizable, according to the definition of the peer group"}; and
- M) adjusting exchange elements to cause constituent to exhibit behaviors which are more valuable to the entity than previous behaviors {Column 3, Lines 13-16, wherein this reads over "improved system and method that is expandable in that behavior characteristics of an entity can be added without restriction, to determine the behavior profile"}.

As for Claim 8, which has same limitation as in Claim 3, therefore it is rejected for the similar reasons set forth in Claim 3.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

I. U.S. Patent:

- 1) U.S. Patent No. 5,724,488 (PREZIOSO) is cited to teach the behavior of entities with common characteristics,
- 2) U.S. Patent No. 6,341,267 (TAUB) is cited to teach behavior capacities to the requirements for successful human performance in any role and situation,
- 3) U.S. Patent No. 6,078,155 (HONARVAR ET AL.) is cited to teach the optimizing management system, and

Art Unit: 3629

- 4) U.S. Patent No. 6,195,643 (MAXWELL) is cited to teach evaluation and decision making systems.

II. Foreign Patent:

- 1) EP0525804a2 (GABORSKI ET AL.) is cited to teach behavior of populations of competitive locally independent processes.

III. Non-Patent Literature:

- 1) Miler, Lewis and Merenski, "A Value Exchange Model for the Channel of Distribution; Implications for Management and Research", Fall 1985, Academy of Marketing Science Journal (pre-1986), Volume 13, No. 4, Pages 1-17.
- 2) Rogerio Pinto, "Innovations in the provision of public goods and services", October 1998, Public Administration & Development (1986-1998), Volume 18, Pages 387-397.
- 3) Crawford and Gram, Social Responsibility as Interorganizational Transaction", October 1978, Academy of Management, The Academy of Management Review (pre-1986), Volume 3, Pages 880-888.

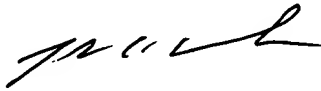
Art Unit: 3629

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cang G. Thai whose telephone number is (703) 305-0553. The examiner can normally be reached on 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (703) 308-2702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CGT 12-1-2004

  
**JOHN G. WEISS**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3600**